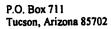
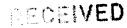
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COMMISSION
LOCKET CONTROL
January 31, 2013

Docket Control Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007

Re: Notice of Filing – UNS Electric, Inc.'s 2013-2022 Ten-Year Plan

Docket No. E-00000D-13-0002

Pursuant to ARS § 40-360.02, please find enclosed an original and thirteen copies of UNS Electric Inc.'s ("UNS Electric") 2013-2022 Ten-Year Plan.

If you have any questions, please contact me at (520) 884-3680.

Sincerely,

Jessica Bryne

Arizona Corporation Commission

DOCKETED

JAN 3 1 2013

DOCKETED BY

cc:

Prem Bahl, Utilities Division, ACC Compliance Section, ACC



UNS Electric, Inc.

2013-2022

TEN-YEAR PLAN

SUBMITTED TO THE
ARIZONA CORPORATION COMMISSION
JANUARY 2013

Docket No: E-00000D-13-0002

## Contents

Introduction	3
Load Forecasting	3
Service Territories	
Mohave County	4
Santa Cruz County	
Mohave County Planned Transmission Facilities Descriptions	
Griffith - North Havasu Transmission	6
Santa Cruz County Planned Transmission Facilities Descriptions	7
Upgrade existing 115kV transmission line to Nogales	

### **Introduction**

This 2013-2022 Ten-Year Plan is submitted by UNS Electric, Inc. ("UNS Electric") pursuant to A.R.S. § 40-360.02. Included with this plan are transmission facilities planned for both the Mohave and Santa Cruz County service territories.

Previously reported facilities that have been completed or canceled, are not included. Projects that have in-service dates of To Be Determined ("TBD") are projects that are being considered but their in-service dates are currently beyond the ten-year planning horizon but may move into the ten-year planning horizon in subsequent studies.

This report includes system maps depicting the existing transmission networks and planned or contemplated projects followed by individual project descriptions. The maps and descriptions are intended to be general planning level documents to explain projects conceptually. Therefore the maps and descriptions do not suggest specific routings or facility locations.

#### **Load Forecasting**

UNS Electric's 2013 – 2022 Ten-Year Plan was developed based on UNS Electric's Corporate Forecast approved in February 2012. This forecast took into account distributed renewable generation and energy efficiency programs, as well as UNS Electric retail customer load.

#### **Service Territories**

Following this brief discussion of activities in the service territories are maps of the planned facilities and details of the proposed projects.

#### **Mohave County**

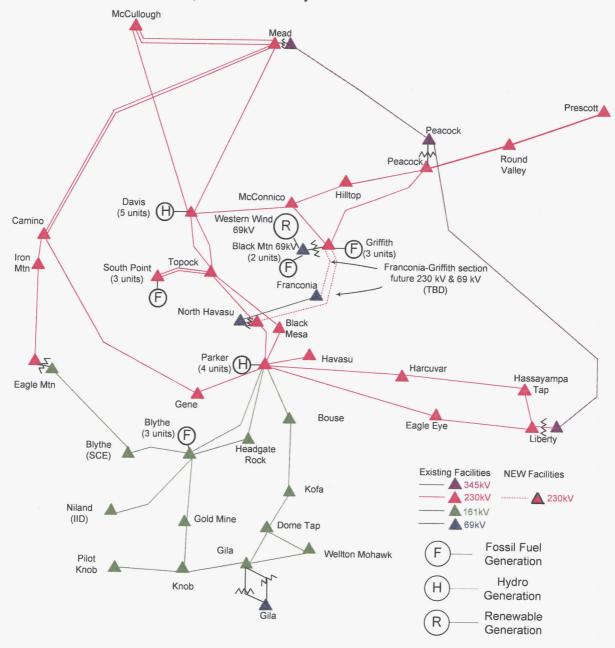
UNS Electric currently has an approved Certificate of Environmental Compatibility ("CEC") (Case No. 88) for the Griffith – North Havasu 230kV line. UNS Electric has received an extension to the expiration date of this CEC to 2022. The timing for construction of this project is predicated on results of load growth in conjunction with limitations on the ability of the Western Area Power Administration ("Western") transmission system to support this load growth. A portion of this project (North Havasu to Franconia) was completed in 2007 and is currently energized at 69kV for distribution needs at Franconia. UNS Electric will continue to work with the Colorado River Transmission ("CRT") subcommittee of the Southwest Area Transmission sub-regional planning group to address issues in Mohave County.

#### Santa Cruz County

UNS Electric received a CEC in 2009 (Case No. 144, Decision No. 71282) to rebuild and convert the existing 115kV line between Western's Nogales switchyard and the UNS Electric Valencia substation to 138kV. Part of this project includes transferring the upstream transmission provider from Western to Tucson Electric Power Company ("TEP"), by transferring the point of interconnection of UNS Electric from Western's Nogales switchyard to TEP's Vail Substation. This rebuild and conversion will be completed in 2014.

# **Mohave County**

Figure 1. Mohave County Transmission System



#### UNS Electric 10-YEAR PLAN TRANSMISSION FACILITIES

Line Designation Size

Griffith - North Havasu Transmission

a) Voltage

230 kV

b) Capacity

300 MVA (thermal)

c) Point of Origin

**Griffith Substation** 

d) Point of Termination

North Havasu Substation

e) Length

Approximately 40 miles

Routing

West of and parallel to I-40 to Santa Fe Ranch Rd. interchange. Diagonal southeast to the Parker Davis line at Highway 95. Parallel to PD-1 to North Havasu Substation site southeast of the Lake Havasu City airport. Routing to be within corridor as approved and described

in CEC Order #88.

Purpose

Reinforce the existing transmission grid and provide interconnection between UNS Electric load centers in Mohave County.

Date

a) Construction Start

North Havasu to Franconia, 2007

b) In-Service Date

North Havasu to Franconia, 2007

[Complete]

Franconia to Griffith, TBD

Is Certificate Necessary

Case # 88<sup>1</sup> -- An extension was approved by the ACC in July 2012 which expires in

2022.

**Technical Studies** 

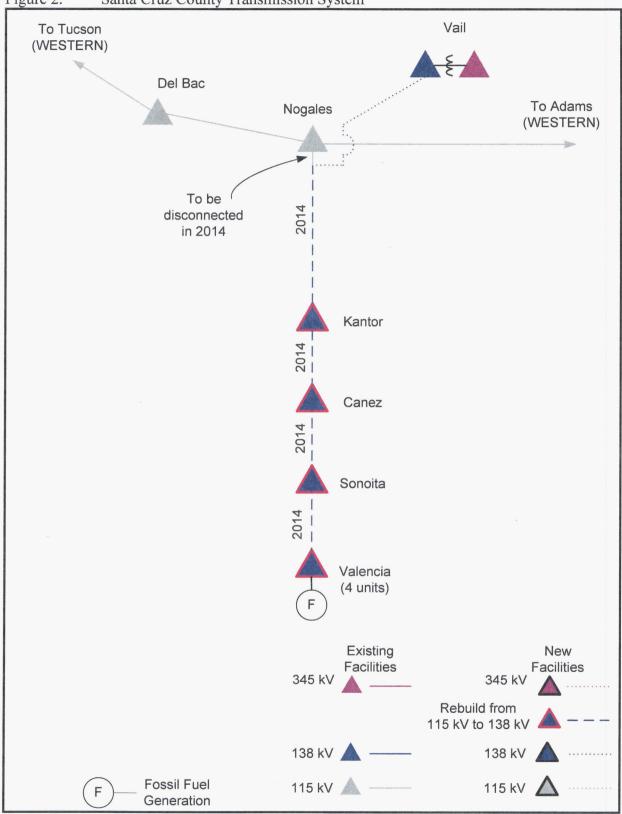
Studies completed via CATS, CRT, and WATS, and is part of the WestConnect

Transmission Plan.

<sup>&</sup>lt;sup>1</sup> Hilltop to Griffith portion of line already completed. UNS Electric 10-Year Plan 2013-2022

## **Santa Cruz County**





#### UNS Electric 10-YEAR PLAN TRANSMISSION FACILITIES

Line Designation

Upgrade existing 115kV transmission

line to Nogales

Size

a) Voltage

138-kV

b) Capacity

System dependent

c) Point of Origin

Vail Substation

d) Point of Termination

Valencia Substation

e) Length

Approximately 60 miles

Routing

Generally West from TEP's Vail Substation to the Nogales Substation and then south to UNS Electric's

Valencia Substation.

Purpose

The upgrade of the transmission line

increases transmission system

reliability and provides additional load serving capacity to UNS Electric's

Santa Cruz Service Area.

Date

a) Construction Start

2013

b) In-Service Date

2014

Is Certificate Necessary

Case No. 144

**Technical Studies** 

Internal UNS Electric studies.